

Amendments to the Drawings

The attached sheets of drawing have been formalized without amendments, which replace the original sheets.

Attachment: Eight (8) Replacement Drawing Sheets

REMARKS

Applicants have carefully examined the Final Office Action of November 20, 2008, in which claims 1-5, 22-31, 33 and 34 are pending and were rejected. Applicants respectfully request reconsideration in light of the above amendments and following remarks.

Drawings

The drawings were objected to under 37 CFR §1.83(a) as not showing all the elements of claims 33 and 34, newly presented in the last response. These claims have been cancelled, rendering the objection moot. Applicants therefore request withdrawal of the objection and acceptance of the drawings.

Claim Rejections under 35 U.S.C. §112

Claims 1-5, 22-31 and 33-34 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, the language in claim 1 “wherein the catheter is radiopaque under x-ray fluoroscopy” was objected to. The disclosure describes such a catheter in, for example, paragraph 28: “For example, while the fluoroscopic image may identify the location and general orientation of distal end 4 at the target site...” A catheter whose location and general orientation may be identified through the use of a fluoroscopic image is radiopaque under x-ray fluoroscopy. Therefore, “the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed.” See, e.g., *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). Applicants thus submit that these claims are in compliance with 35 U.S.C. §112.

Claim Rejections under 35 U.S.C. § 103

Claims 1-2, 5, 24-31 and 33-34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hecke (USPN 5,448,989) in view of Kittrell (USPN 5,693,043). Applicants respectfully traverse the rejection because the cited prior art references do not teach or suggest each and every element of the claimed invention.

For example, claim 1 recites “a plurality of tube wall bending indicators...wherein the plurality of tube wall bending indicators provide an indication of tube wall bending to indicate the orientation of the reference portion of the catheter relative to the anatomical reference.”

It is argued in the Final Office Action that elements 10 and 11 of Heckeles anticipate this element. However, elements 10 and 11 of Heckeles are control wires, and there is no teaching or reasonable supposition that they can function “to indicate the orientation of the reference portion of the catheter relative to the anatomical reference.”

Indicators indicate, and indication entails the conveyance of some sort of information. However, as the device of Heckeles is constituted, control wires 10 and 11 can convey no information. Control wires 10 and 11, as shown in Figure 1, are entirely concealed within other components of the device. At their proximal ends they are attached to an adjusting device 21 and concealed within a housing 7 as shown in Figure 1. Adjusting device 21 is used to tension control wires 10 and 11 to cause length 2 to bend. In other words, the control wires convey mechanical energy to the shaft from the adjusting device and are incapable of conveying information.

Therefore, for at least the reason that neither Heckeles nor Kittrell disclose “a plurality of tube wall bending indicators” as alleged, and that “all words in a claim must be considered when judging the patentability of a claim against the prior art,” Applicants submit that claim 1 is in condition for allowance. As claims 2, 5, 24-31 and 33-34 depend from claim 1 and contain additional elements, Applicants submit that these claims are in condition for allowance as well.

Claims 3-4 and 22-23 were rejected as being unpatentable under 35 U.S.C. §103(a) over Heckeles in view of Kittrell and Bullister (USPN 6,171,253). Applicants respectfully traverse the rejection.

These claims are allowable as depending from claim 1, which Applicants submit is allowable, and containing additional elements.

These claims are also allowable for the following reasons. Heckeles in view of Kittrell is cited for the reasons given above with respect to claim 1. Bullister is cited as “teaching a tube wall having a plurality of strain gauges.” However, the strain gauge of Bullister is a pressure sensor mounted on a thin diaphragm of the tube. Such a strain gauge is cannot be

used to provide an indication of tube wall bending in the tube of Heckeles. The strain gauge of Bullister is mounted on a single surface and is used to measure changes of the surface that correspond to changes in pressure in the main fluid channel. The tube of Heckeles is composed of discrete segments that move in relation to each other to make the tube as a whole bend, but which as individual segments are rigid. A strain gauge mounted on a segment, therefore, will not become curved with the tube and will not provide an "indication of tube wall bending" as claimed nor will such a strain gauge "determine the dimensional different (sic) between the tube wall" as asserted on page 3 of the Final Office Action. Because the proposed modification will not function as asserted, there is no suggestion or motivation to modify the references as proposed. As such, Applicants respectfully assert that claims 2-4 and 22-23 are allowable over the cited art for at least these additional reasons.

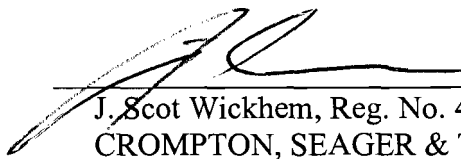
Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,
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By their Attorney,

Date: _____

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